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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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SUITE 4000 NEW YORK, NY 10168			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Commencer	10/566,086	BURGERMEISTER ET AL.			
Office Action Summary	Examiner	Art Unit			
	HAMID R. BADR	1781			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) ☐ Responsive to communication(s) filed on <u>RC</u> . 2a) ☐ This action is FINAL . 2b) ☐ This action for allowed closed in accordance with the practice under	is action is non-final. ance except for formal matters, pro				
Disposition of Claims					
 4) Claim(s) 13-18 and 20-29 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 13-18 and 20-29 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 					
Application Papers					
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate			

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DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/10/2011 has been entered.

1. Claims 13-18, and 20-29 are being considered on the merits.

Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 13-18 and 20-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 3. Claim 13 is indefinite for "Which blend is otherwise a suspension". As the claim recites, blending the dry materials with water produces a suspension. It is not clear what is meant by "otherwise a suspension". The production of suspension is implicit in the blending process, therefore, this phrase appears to be redundant.
- 4. Claim 13 is indefinite for "initiation of fermentation". Since the fermentation starts the moment yeast gets activated (in case of dried yeast), it is not clear whether the

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blending is carried out at ambient temperatures and then the dough is placed at 0C-2C after the dough is formed.

- 5. Claim 13 is indefinite for "storing the pre-dough concentrate at a temperature in a range of 0C to 6C". The stage before storing the dough, recites a temperature of 0C-4C. At this temperature range, the fermentation rate is reduced because baker's yeast is a mesophilic organism. It is therefore, not clear why the dough is stored at the same temperature range to reduce the fermentation rate.
- 6. It is suggested to claim the invention in a form to avoid confusion, specifically by avoiding the overlapping temperatures as presently claimed. This way the process stages are clearly separated and the invention is presented in a realistic manner.
- 7. Claim 15 is indefinite for "wherein the temperature of the blend during a part of the fermentation is 4 to 8C". Again the statement is not clear. In claim 13, it is stated that at 0C to 6C, the fermentation rate is reduced. Therefore, there is still some fermentation going on. It is not clear whey a new overlapping temperature range is introduced again reciting that the temperature of the blend during a part of fermentation is 4C to 8C.
- 8. Claim 16 is also indefinite for the same reason stated for claim 15.
- 2. Claim 23 recites the limitation "thermally modified ground product" in claim 21.

 There is insufficient antecedent basis for this limitation in the claim.
- 9. Claim 24 is indefinite for depending on claim 23. it appears that it should depend on claim 21.

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Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claim13-18 and 20-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Domingues et al. (WO 93/01724; hereinafter R1) in view of Schou et al. (EP 0 152 943; hereinafter R2)
- 12. R1 discloses a refrigerated yeast leavened dough composition and method of making the same.
- 13. R1 discloses that the ceased activity of the yeast at refrigeration temperatures will extend the storage of the dough at refrigeration temperatures as presently claimed.
- 14. R1 discloses that the yeast is rehydrated at a temperature of less than 10C and mixed with flour, water etc. The dough may be proofed at elevated temperatures. After it has been cooled, the dough may be stored at refrigeration temperature for 90 days or more without any substantial likelihood of rupturing a container due to an increase in carbon dioxide pressure. (page 3, summary of invention).
- 15. R1 discloses another embodiment in which yeast-containing dough composition which can be refrigerated for extended periods of time. Such a composition includes dried yeast, chilled water, and flour. (page 4, first paragraph). It is therefore, clear that the blend of flour, yeast is introduced to chilled temperatures when mixed with chilled water where in the fermentation is simultaneously initiated.

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16. R1 discloses that the water is preferably added 0C. The additional components of the dough can also be mixed with the yeast water slurry. Ingredients necessary to achieve a desired texture or taste in the final cooked dough product may be added at this stage. (page 7, paragraph 2)

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- 17. R1 teaches of storing the dough immediately at refrigeration temperature at 4C to 7.2 C which holds the yeast in an inactive state. (page 7, last paragraph). Alternatively the dough composition may be held at an elevated temperature for a predetermined period of time to permit the yeast to leaven the dough shortly after the dough composition has been mixed. Once the dough has been leavened, it may then be stored at refrigeration temperatures to hold the yeast in its inactive state. (page 8, first paragraph).
- 18. Given that the dough ingredients are mixed; it is clear that the fermentation of the dough starts and the temperature of the dough starts to increase due to yeast activity and given that R1 discloses that the dough is immediately stored at refrigeration temperature of 4C-7.2C, cooling of the dough starts immediately after the dough is placed at refrigeration temperature. It is also clear that depending on the volume of the dough, the cooling of the whole mass of the dough will take some time. The larger the volume of the dough, the longer the cooling time will be. However, as disclosed by R1, the mass of the dough should be cooled to 4C to 7.2C which overlaps with the 0-6C as presently claimed.
- 19. It is noted that claim 20, requires the production of a pre-dough concentrate (interpreted by the Examiner as a sponge dough) which is then mixed with flour and

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water to make a final dough for baking. Since the sponge method is known in the art, the dough composition as disclosed by R1 can be obviously made as a sponge dough (a pre-dough) and can be mixed with flour and water to make a final dough for baking later.

- 20. While R1 discloses that other ingredients can be mixed with the yeast flour mixture to affect the texture or flavor of the finished product, R1 is silent regarding the incorporation of a cooked flour product in the yeast-flour mixture.
- 21. R2 discloses a method of making bread where the cereal flour or mixture of flours is precooked by extrusion. The extrusion is carried out at temperature range of 150-180C. A composition is made from about 40% of rye meal and about 60% of wheat bran. (Abstract).
- 22. R2 teaches of a method in which a mixture of wheat flour (30%) and wheat bran (70%) is extruded at 150C. After the extrusion process, the mixture is pulverized in a mill. Rye meal is then mixed with more wheat flour, water, dough conditioner (acidifying agent), baker's yeast, and approximately 3% of the mixture and baked into a bread. The mixture contains 10 parts by weight of the extruded, pulverized product. (Example 2, pages 5-6). Given that the process temperature, as disclosed by R2, is above the gelatinization temperature of starch, it is obvious that gluten in the thermally modified product will be denatured as presently claimed. It is also noted that the incorporation of the cooked flour product increases the water absorption rate of the flour into which the cooked product is incorporated. Therefore, depending on the desired level of water absorption, amount of the cooked pulverized product can be calculated and optimized

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as presently claimed. Increased water absorption will give a better yield of the baked product.

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23. Sponge and direct dough methods as presently claimed are also known in the art. Levels of incorporation of sponge into the final dough are also known in the art.

24. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to make a sponge dough (pre-dough) containing thermally processed cereal flour and refrigerate the sponge to lower the fermentation rate at low temperature of refrigeration as disclosed by R1. One would do so to be able to keep the sponge for a longer period of time having controlled the fermentation. Absent any evidence and based on the combined teachings of the cited references, there would be a reasonable expectation of success in making such a sponge.

Response to Arguments

Applicants arguments have been reviewed thoroughly. These arguments are not deemed persuasive for the following reasons.

- 1. Applicants argue that R1 teaches processes intended to limit carbon dioxide production through the selected yeast strain.
- a. One of the embodiments in R1 deals with selected strain. However, in another embodiment, R1 discloses that regular yeast, flour and chilled water are mixed and refrigerated.
- 2. Applicants argue that R1 teaches of substantially halting the carbon dioxide production at refrigeration temperatures.

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a. The Examiner believes that this teaching is equivalent to the limitation of claim13, reciting that the fermentation continues at a reduced rate.

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- 3. Applicants argue that the teachings of R2 are not consistent with the claimed subject matter that concerns pre-dough concentrates.
- a. R2 is a teaching (secondary) reference disclosing certain aspects of the claimed invention. R2 is being cited in an obviousness type rejection, and thus is not required to teach whatever disclosed by the primary reference which teaches of the pre-dough concentrate.
- b. Furthermore, R1 clearly discloses that materials which can provide flavor, color, or functionality may be added to the refrigerated dough. Since partially cooked flour provides functionality in the form of increased water absorption, it can be used in the process of R1 calling for materials providing functionality to the dough.
- 4. Applicants argue that R1 never practices the teachings and that the dough disclosed by R1 is at 30-40 C at all times.
- a. Please take a closer look at R1. At page 7, R1 discloses that the liquid (water) used is a chilled liquid at 0 to 10C. Then the last paragraph at page 7; R1 discloses that the dough may be **IMMEDIATELY** stored at refrigeration temperature between 0 and 12C. The preferable range is 4-7.2 C. R1 then discloses that storing the dough in this manner holds the yeast in an inactive state wherein substantially ceases production of carbon dioxide. This is clearly the reduce fermentation rate that is being presently claimed.

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7. Applicants argue that Domingues does not suggest any urgency in commencing the cooling process and the temperature at which it is to take place.

a. Please see 4a above.

Applicants are advised to present their invention in a clear, precise language and claim the real invention. Reciting limitations in a way so as to avoid the teachings of the prior art will not produce positive results.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HAMID R. BADR whose telephone number is (571)270-3455. The examiner can normally be reached on M-F, 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hamid R. Badr Examiner Art Unit 1781

/Keith D. Hendricks/

Supervisory Patent Examiner, Art Unit 1781